

***I claim:***

1. A method of verifying compatibility of components in a computer system, comprising:

5 reading, from at least one CPU register, a CPU maximum power value indicating the maximum power the CPU is rated to consume during operation;

determining a host maximum power value indicating the maximum power the computer system is rated to supply; and

10 if the CPU maximum power value exceeds the host maximum power value, invoking a first error handler.

2. The method of claim 1, further comprising:

reading, from at least one CPU register, a CPU maximum temperature value indicating the maximum temperature at which the CPU is rated to operate;

15 determining a host minimum temperature value indicating the minimum CPU temperature the host is rated to maintain; and

if the host minimum temperature value exceeds the CPU maximum temperature value, invoking a second error handler.

20 3. The method of claim 2, wherein:

the first and second error handlers are the same error handler.

4. The method of claim 2, wherein:

25 the CPU maximum power value and the CPU maximum temperature value are read from the same CPU register.

5. The method of claim 1, wherein:  
determining the host maximum power value comprises identifying a motherboard  
and a chassis of the computer system.

5 6. The method of claim 5, wherein:  
identifying the motherboard comprises determining voltage regulation characteristics  
of the motherboard.

10 7. The method of claim 5, wherein:  
identifying the motherboard comprises reading a register on the motherboard.

8. The method of claim 5, wherein:  
identifying the chassis comprises determining power supply and cooling  
characteristics of the chassis.

15 9. The method of claim 5, wherein:  
identifying the chassis comprises reading hardwired pins of a chassis connector.

20 10. The method of claim 2, wherein:  
the host minimum temperature value is determined responsive to cooling  
characteristics of a chassis of the computer system and to the maximum CPU  
power value.

25 11. The method of claim 1, wherein:  
the first error handler causes an error message to be displayed.

12. The method of claim 1, wherein:

the first error handler causes the computer system to be powered down.

13. A machine-readable storage or transmission medium containing code that, when executed on a computer system, causes the computer system to perform a method of verifying compatibility of its components, the method comprising:

5 reading, from at least one CPU register, a CPU maximum power value indicating the maximum power the CPU is rated to consume during operation;  
determining a host maximum power value indicating the maximum power the computer system is rated to supply; and  
10 if the CPU maximum power value exceeds the host maximum power value, invoking a first error handler.

14. The storage or transmission medium of claim 13, wherein the method further comprises:

15 reading, from at least one CPU register, a CPU maximum temperature value indicating the maximum temperature at which the CPU is rated to operate;  
determining a host minimum temperature value indicating the minimum CPU temperature the host is rated to maintain; and  
if the host minimum temperature value exceeds the CPU maximum temperature value, invoking a second error handler.

20 15. The storage or transmission medium of claim 14, wherein:  
the first and second error handlers are the same error handler.

16. The storage or transmission medium of claim 14, wherein:

25 the CPU maximum power value and the CPU maximum temperature value are read from the same CPU register.

17. The storage or transmission medium of claim 13, wherein:  
determining the host maximum power value comprises identifying a motherboard  
and a chassis of the computer system.

5 18. The storage or transmission medium of claim 17, wherein:  
identifying the motherboard comprises determining voltage regulation characteristics  
of the motherboard.

10 19. The storage or transmission medium of claim 17, wherein:  
identifying the motherboard comprises reading a register on the motherboard.

20. The storage or transmission medium of claim 17, wherein:  
identifying the chassis comprises determining power supply and cooling  
characteristics of the chassis.

15 21. The storage or transmission medium of claim 17, wherein:  
identifying the chassis comprises reading hardwired pins of a chassis connector.

20 22. The storage or transmission medium of claim 14, wherein:  
the host minimum temperature value is determined responsive to cooling  
characteristics of a chassis of the computer system and to the maximum CPU  
power value.

25 23. The storage or transmission medium of claim 13, wherein:  
the first error handler causes an error message to be displayed.

24. The storage or transmission medium of claim 13, wherein:  
the first error handler causes the computer system to be powered down.